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**MONEY**

MARCH 1961

# BUSINESS REVIEW

Managing the Corporate "Money" Position

A Good Year for District Banks, but . . .

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FOR THE RECORD

1950

## BUSINESS REVIEW

is produced in the Department of Research. Clay J. Anderson was primarily responsible for the article "Managing the Corporate 'Money' Position" and Bernard Shull for "A Good Year for District Banks, but . . ." The authors will be glad to receive comments on their articles.

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"Our job is production. We are not in the investment business." So stated an official of a large business corporation in explaining the principles followed in managing the company's cash and short-term investment positions. This statement probably reflects the attitude of management of many nonfinancial corporations.\* Production is the primary source of income.

Nevertheless, many companies have found that they can derive considerable income by investing cash not currently needed in operations. This policy of investing excess corporate cash has attracted considerable attention in recent years. It has also raised a number of questions. What is the basic philosophy underlying these investment programs? Do rising short-term rates activate idle corporate cash balances? What is the effect of corporate policies on velocity of circulation of money? Has the policy of investing excess cash reduced corporate deposits in the banks? What kinds of securities are popular with corporate investors?

\* Unless otherwise noted, corporation as used in this article refers to nonfinancial corporations.

## MANAGING THE CORPORATE "MONEY" POSITION

This article attempts to throw some light on these questions. It deals primarily with how business corporations manage their "money" position—cash and short-term investments. It is based largely on information obtained from interviews with officials of corporations of varying size and types of business activity. The article also shows postwar trends in corporate cash and Government securities.

### **Nature of the problem**

Corporations handle a huge amount of cash. Last year, sales of manufacturing corporations alone—a rough indication of cash inflow—exceeded \$350 billion. Cash receipts are never in just the right amount and at just the right time to meet expenditures. Sometimes the cash inflow is larger, at other times smaller than current expenses. The problem is to keep enough cash on hand to meet expenses, but not to have idle cash that earns no income.

Several postwar developments have encouraged corporations to pay closer attention to cash. A substantial rise in tax liabilities requires the

accumulation of funds (or borrowing) to meet large quarterly tax payments. Rising costs and increases in plant and equipment mean that larger sums must be charged to depreciation reserves. Higher interest rates make it more expensive to hold idle cash. The favorable results achieved by some large corporations from investing excess cash have been an inducement for other corporations to adopt similar policies.

A prerequisite for effective portfolio management is determination of the minimum cash balance consistent with the company's operating needs. A helpful device used by a number of corporations is cash budgeting—projecting the company's cash inflow and outflow. Cash-flow analysis usually consists of more detailed estimates for the near-term and rougher estimates for the longer-term future. Some companies make rough projections for several years in advance—five or even ten years. Ability to project the cash flow accurately is influenced by the regularity and stability of the company's income and disbursements.

Cash projections serve two main purposes. The estimates, together with experience, enable officials to have a much better idea of the minimum amount of cash required for operations. Projections are also useful in managing the short-term investment portfolio.

The size of the cash balance maintained by a corporation is influenced by factors other than direct operating needs. Management may prefer to "play it safe"—to have a cushion for unforeseen developments. Some companies maintain "good" balances with their major banks to promote good will and to improve access to bank credit when money is tight. Other companies pare bank balances more closely, endeavoring only to compensate the banks for account activity and other services rendered.

### Principles of portfolio management

The primary objectives in managing the corporate investment portfolio are to derive income from cash not currently needed in operations and to have cash "on the barrel head" whenever needed. Thus safety and liquidity as well as yield are important considerations in investing temporary excess receipts. Emphasis on these factors varies among corporations, depending on such things as the volatility of the cash flow, accuracy of cash projections, and the attitude of management. Even though there are no hard and fast lines dividing them, corporations can be classified into three general groups with respect to their short-term investment policies.

One group consists of companies that follow a quite conservative approach. Some buy only short-term Treasury bills; others limit their portfolios to short-term Government securities. Little if any attempt is made to space maturities to meet a series of anticipated cash needs.

This conservative approach in managing short-term investments may reflect several factors. For one thing, it is likely to be employed by companies with relatively little cash to invest. Corporations with only small amounts of excess cash to invest would derive little additional income for the extra time required in the management of a more diversified portfolio. In the words of one official, "the additional income would not be worth the effort and risk." A volatile cash flow and hence inability to estimate cash needs accurately often cause management to put great stress on liquidity. The view that the job of a business corporation is to produce goods and services may well result in little emphasis being placed on the management of cash and short-term investments.

The investment policy of a second group of corporations is characterized by a more diversified investment portfolio but with a relatively

slow rate of turnover. These companies invest in a greater variety of short-term securities in order to obtain a better yield without unduly sacrificing liquidity. Liquidity is achieved, in part, by spacing maturities so that run-offs will provide cash just prior to lump-sum disbursements such as tax, dividend, and interest payments. When funds are to be invested, the tendency is to select securities (acceptable under the company's investment policy) of the desired maturity currently affording the higher return. Once acquired, securities are held until maturity; they are rarely sold in an effort to get a better return.

The most distinguishing characteristic of companies in the third group is active management of the portfolio to get the maximum return consistent with safety and the individual company's liquidity needs. Portfolios are more diversified both as to type of security and maturity. More attention is devoted to cash-flow projections in order that maturities can be better adapted to anticipated needs. As a result, a portion of the portfolio may be in very short maturities, another in securities maturing within a year, and if there is a significant yield advantage a part may be in maturities up to two or three years or even longer.

Corporations in the third category do not hesitate to sell and re-invest to take advantage of yield differentials among maturities as well as among different types of securities. The price of a security usually rises and the yield falls as it approaches maturity. The average return on a portfolio of Treasury bills, some officials pointed out, may often be improved by investing in the 91-day bill, selling as it approaches maturity, and re-investing in another 91-day bill. Another device sometimes used is adjusting maturities in anticipation of changes in rates—shortening maturities in anticipation of rising rates and lengthening them when rates are expected to fall. A few com-

panies avoid maturities that are exceptionally popular because of uniform tax and dividend payment dates. Experience indicates a better yield can usually be obtained by buying somewhat shorter maturities and employing the funds, perhaps in a repurchase agreement, in the interval between maturity and the actual cash need; or the net yield may be improved by buying a slightly longer maturity and selling it just prior to the date the funds are needed. Active management of the investment portfolio results in a considerably higher rate of turnover than is characteristic of companies in the first and second groups.

### **Composition of the portfolio**

Government securities are by far the most popular form of investment for nonfinancial corporations, both in terms of total amount and number of companies. The safety, broad market, and wide range of maturities available in Governments are strong appeals to most corporate investors.

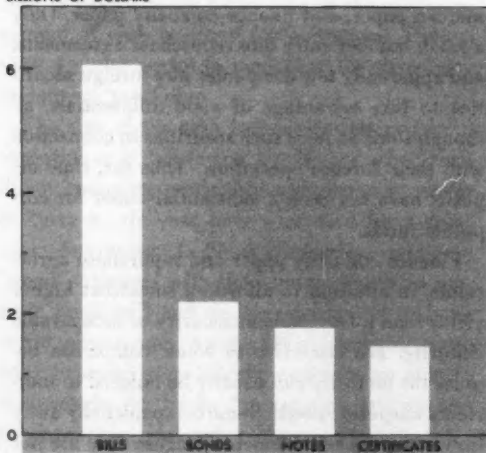
There is a tendency, however, for more corporations to branch out into other types of investments such as Government agency issues, short-term state and municipal securities, commercial paper, and finance company paper. Only a small number enter into repurchase agreements, and apparently few companies buy foreign securities to take advantage of yield differentials, although some acquire such securities in connection with their foreign operations. Thus far, time deposits have not been a substantial outlet for corporate funds.

Finance company paper and repurchase agreements, in addition to affording somewhat higher yields than a Government security of comparable maturity, are attractive to some companies because the maturity can usually be tailored to individual corporate needs. Some companies shy away from repurchase agreements because they are not

in a position to appraise the credit risk involved; others, regarding r.p.'s as a form of loan, do not want to get into the "lending business." Time deposits are not considered a suitable outlet, especially by large corporations. One disadvantage is that the rate is usually attractive only in a period of recession when market rates are low and there is little demand for funds. Banks are less willing to accept time deposits in such periods because of the difficulty of investing them profitably, and corporate officials are reluctant to press them to do so. For large corporations, the limited amount that can be put on time deposit and the fact that deposits must be scattered among a large number of banks are other disadvantages. The issue of negotiable time certificates of deposit, recently announced by some large banks, may prove more attractive for corporate funds.

Corporate portfolios are heavily concentrated in short maturities. Holdings of Government securities as of the end of last November were mainly in short-term issues—52 per cent in

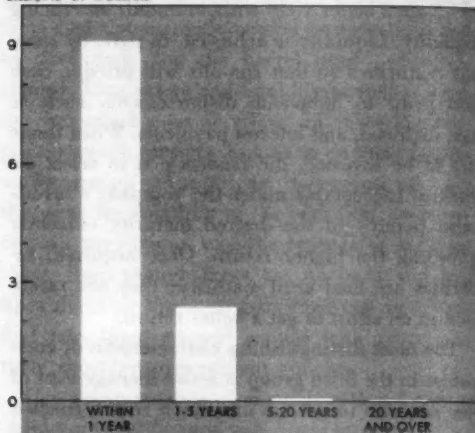
CORPORATE HOLDINGS OF MARKETABLE  
GOVERNMENT SECURITIES\*  
(NOVEMBER 30, 1960)



\* 497 nonfinancial corporations; Treasury Ownership Series.

CORPORATE HOLDINGS OF GOVERNMENTS  
BY MATURITY CLASS\* (NOVEMBER 30, 1960)

BILLIONS OF DOLLARS



\* 497 nonfinancial corporations; Treasury Ownership Series.

Treasury bills, 13 per cent in certificates, 16 per cent in Treasury notes, and 19 per cent in bonds, mostly of short maturity. The distribution of Governments by maturity shows that the bulk of corporate holdings matured within one year and practically all of the remainder, within one to five years. Data are not available on investments other than Governments, but the interviews indicated these investments are also of short maturity.

### Influence of market rates

Two possible effects of interest rates on corporate management of short-term investments need to be distinguished—the effect of the level of rates on the volume of corporate funds put into short-term assets, and the effect on the allocation of funds among different types of investments.

There is little evidence that cyclical changes in the level of interest rates have any significant direct effect on the volume of funds a corporation puts into short-term investments. One of the guiding principles in portfolio management is to put all cash in excess of a minimum working balance



into some liquid earning asset. Once a company has initiated such a program, it is not feasible to discontinue investing excess cash just because market rates decline. Out-of-pocket expense incurred in handling the investment portfolio is quite small. There is no express policy of intensifying efforts to economize cash as interest rates rise, according to all of the officials interviewed. In fact, some stated that when profits from operations are small—usually a period of recession when interest rates are also low—they intensify their efforts to get the best possible return from the investment portfolio.

High market rates may attract some additional funds by inducing corporations to initiate a program of investing excess cash. It may well be that if data were available they would show that most corporations started their programs of short-term investments in periods of relatively high interest rates. Even so, the volume attracted by rising rates in recent years has probably been relatively small. Large corporations have been investing ex-

cess funds for many years—some used the call loan market for this purpose in the twenties—and they hold a substantial part of all corporate cash.

There has been a tendency in recent years for corporate holdings of Governments and short-term rates to move upward and downward together. But the movement of both seems to result primarily from a common cause, cyclical fluctuations, rather than rate changes inducing corresponding changes in corporate holdings of Governments. Business recovery is usually accompanied by an increase in market rates; it is also accompanied by an accumulation of corporate cash available for investment as receipts rise more rapidly than disbursements.

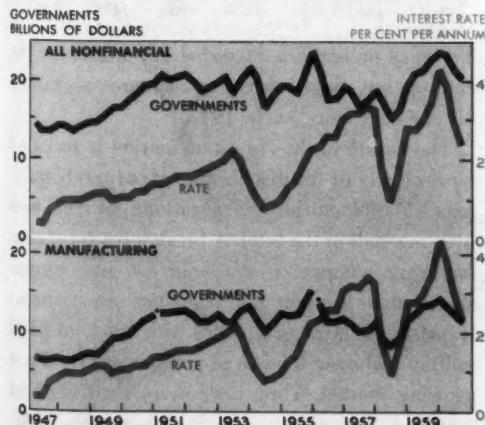
Interest rates are influential in allocating corporate funds among alternative types of investments. Funds are attracted to those types of securities offering the higher yields, and anticipation of changes in rates may lead to some shortening or lengthening of maturities.

### Impact on velocity

The effect of corporate investment policies on the velocity of money appears to be mainly secular rather than cyclical. Corporate cash balances have moved generally upward during the postwar period. There is no observable tendency for cash holdings to decline as market rates rise, and increase as rates fall.

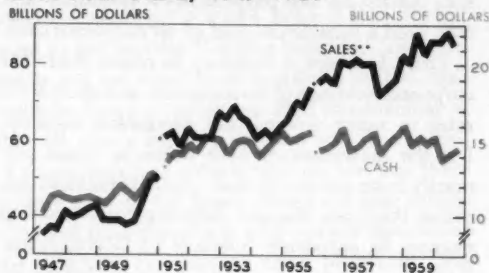
The development of cash saving techniques enables corporations to handle a larger volume of business with the same amount of cash. A substantial rise in sales relative to cash balances of manufacturing corporations since 1954 is evidence of a more efficient use of cash. Cash saving techniques and the spread of such techniques to other corporations occur gradually and tend to produce a secular rise in velocity. Moreover, for reasons already given, it seems likely that the

### CORPORATE GOVERNMENTS AND INTEREST RATE ON TREASURY BILLS,† 1947-1960



† 91-day bill, quarterly average.  
New series.

## MANUFACTURING CORPORATIONS— CASH AND SALES, 1947–1960



\* New series.

\*\* Total for quarter.

major part of the secular impact on velocity has already occurred.

### Effect on bank deposits

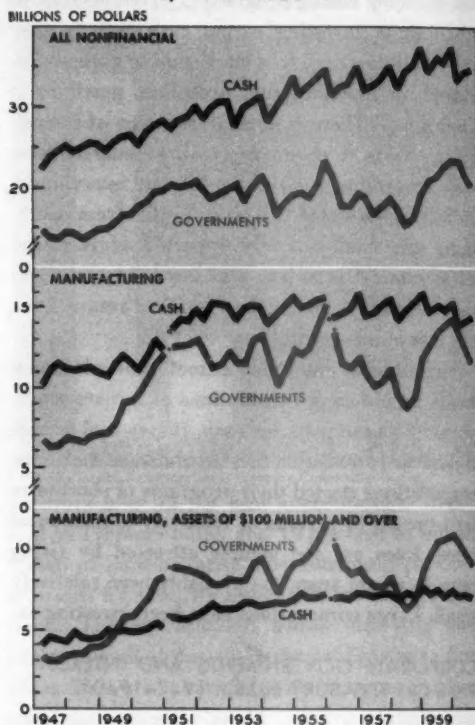
Corporations have increased their bank deposits substantially in the postwar period despite the trend toward investing excess cash in short-term securities. Their cash balances totaled \$35 billion at the end of last September, an increase of 58 per cent since the first quarter of 1947.

Corporate purchases of securities typically transfer deposits from buyer to seller—and frequently from one bank to another—but they do not usually decrease total deposits of the banking system. Such purchases result in a loss of deposits for the banking system only when commercial banks are sellers of the securities the corporations are buying. This may well happen in periods of business recovery and strong credit demands when banks sell short-term Governments to get funds for loans; however, when the loans are made, deposits are increased. The net effect, therefore, is a shift in assets with no change in total deposits.

### Growing market for Governments

Corporations have become an important market for Government securities. Their holdings of

## CORPORATE CASH BALANCES AND GOVERNMENTS, 1947–1960



\* New series.

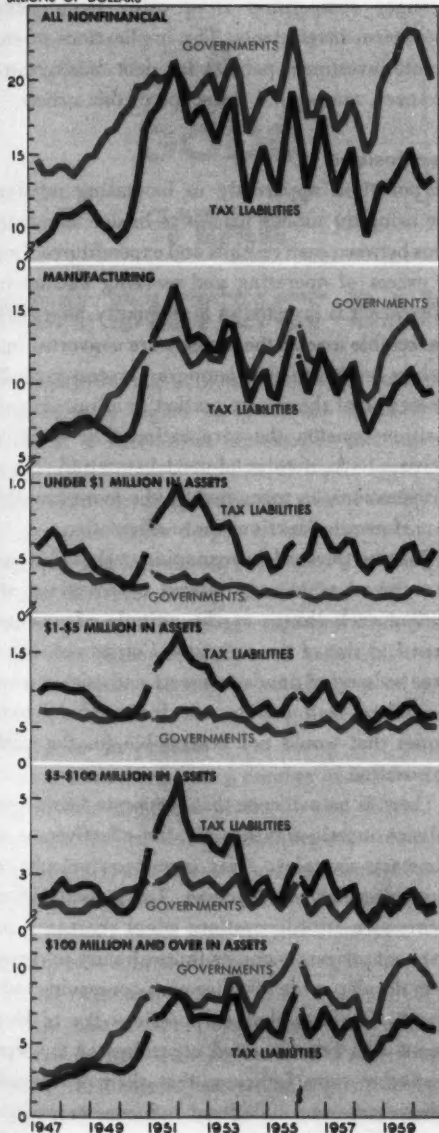
Treasury obligations exceeded \$20 billion at the end of last September, an increase of nearly 40 per cent since early 1947.

The nature of the corporate market is revealed more clearly by the distribution of corporate holdings. Manufacturing corporations owned well over one-half of the total. A breakdown for manufacturing companies available by size groups shows that Government securities are concentrated in the large companies with assets of \$100 million and over. The large companies are also a growing market. They have more than doubled their holdings of Governments since early 1947. Small companies, on the other hand, are not as



# CORPORATE GOVERNMENTS AND TAX LIABILITIES, 1947-1960

BILIONS OF DOLLARS



\* New series.

yet a significant factor in the market. Their investment in Governments is small compared with their cash balances, and they have gradually reduced their holdings of Governments in the post-war period.

Four industries—motor vehicles and equipment, primary metals, petroleum, and chemicals—hold about three-fifths of the Governments owned by manufacturing corporations. Government portfolios of the first two industries show marked cyclical fluctuations. Companies in these industries typically build up their holdings of Governments in the recovery phase of the cycle and then draw them down as taxes and other expenditures rise relative to receipts.

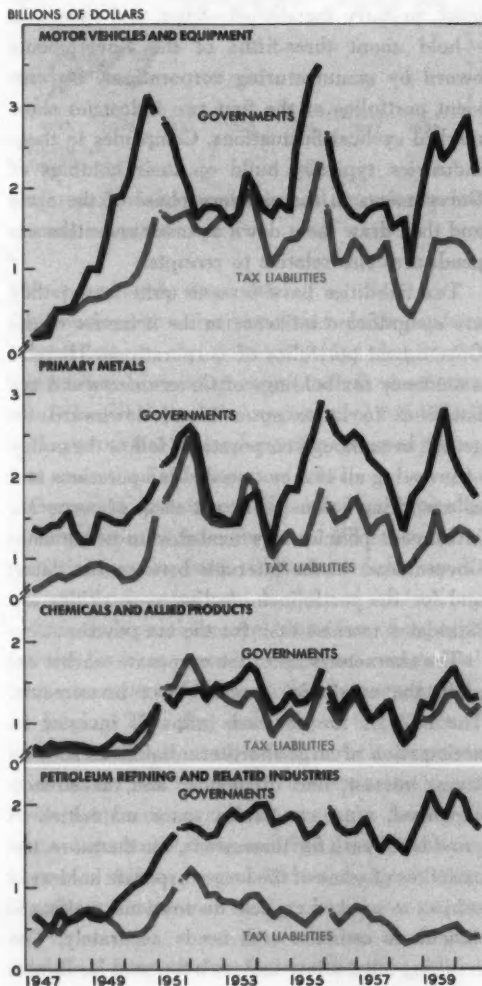
Tax liabilities have become quite large; they are a significant influence in the behavior of the Government portfolios of corporations. There is a tendency for holdings of Governments and tax liabilities to move upward and downward together, even though corporations follow the policy of investing all cash not needed in operations and as a working balance. The net effect of corporate investment policies is a tendency to accumulate Governments in the intervals between tax dates, and for the portfolio to decline as securities are liquidated to raise cash for the tax payments.

The characteristics of the corporate market explain the emphasis on short-term investments. The bulk of the net cash inflow is invested in anticipation of large short-term liabilities such as taxes, interest, and dividends; and, as already explained, most companies space maturities to provide the cash for these needs. Furthermore, the cash flow of some of the large corporate holders is subject to marked cyclical fluctuations, making it difficult to estimate cash needs accurately. The resulting uncertainty increases the need for liquidity.

The size and characteristics of the corporate

market are of considerable significance in formulating debt management policies. The recent trend

#### MANUFACTURING CORPORATIONS— GOVERNMENTS AND TAX LIABILITIES, 1947-1960 (BY INDUSTRY)



\* New series.

toward more diversified portfolios indicates that Government securities are likely to encounter stronger competition from other high-quality, short-term investments. The implications of corporate investment policies for debt management, however, are beyond the scope of this article.

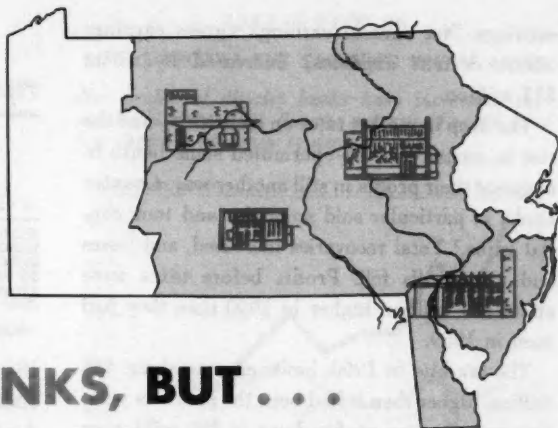
#### Conclusions

Corporations apparently in increasing numbers are using the money market to bridge temporary gaps between cash receipts and expenditures. Cash in excess of operating and working balance requirements is invested in high-quality, short-term marketable assets; these assets are converted into cash as needed to meet temporary excess expenditures. Use of the money market to adjust its cash position benefits the corporation. The resulting increase in the number of participants and volume of operations, in turn, enables the money market to perform its functions more efficiently.

Policies pursued in managing cash and short-term investments vary among corporations, reflecting such things as the attitude of management and size of the company. Companies with a large volume of funds to invest and with a more specialized staff can benefit from refined techniques that would not be feasible for the small corporation.

There is no evidence that corporate investment policies impair significantly the effectiveness of monetary restraint; their impact on velocity is mainly secular, not cyclical. The velocity effect occurs as more corporations adopt short-term investment programs and as those already pursuing them develop more effective cash-conserving techniques. The fact that corporations try to keep excess cash fully invested regardless of the level of market rates indicates that their investment policies are not a significant influence on cyclical fluctuations in velocity.

# A GOOD YEAR



## FOR DISTRICT BANKS, BUT . . .

Net profits were up at district banks this past year. Returns were higher in 1960 than in 1959 because of a substantial increase in earnings on loans and because a number of banks appear to have taken capital gains on the sale of securities. Profits were higher despite an increase in current expenses and income tax payments. Over the past decade, however, many district banks have experienced rapidly rising expenses and profit rates that show some signs of sagging. In perspective, 1960 was only a relatively good year.

### The year in review

During 1960 there were a number of factors tending to decrease bank profits in the district. As business slowed down, time deposits increased significantly, and interest paid on deposits for the year increased about \$20 million. In addition, the movement of credit market conditions from tightness to ease contributed to declining interest rates on securities and loans.

But these factors were more than offset by others. In line with an easier Federal Reserve policy, total earning assets and deposits of banks expanded. Loans—the more profitable part of the banks' business—increased substantially

while securities increased by only a small amount. Though interest rates on securities and loans peaked out during the year, the *average* rate of return on bank holdings of both types of earning asset was greater in 1960 than in 1959. Earnings on loans increased by over \$40 million and this accounted for most of the increase in gross

TABLE I

### EARNINGS, EXPENSES AND PROFITS Third Federal Reserve District Member Banks (Dollar amounts in millions)

ITEM	1960	Change in	
		Amount from 1959	Per cent from 1959
Earnings			
On securities .....	98.2	+ 4.1	+ 4.3
On loans .....	305.4	+41.5	+15.7
All other .....	64.6	+ 3.7	+ 6.1
Total Earnings .....	468.1	+49.2	+11.8
Current Expenses			
Salaries and wages .....	120.4	+ 6.8	+ 6.0
Interest on deposits .....	81.4	+20.0	+32.5
All other .....	108.5	+ 9.2	+ 9.2
Total Expenses .....	310.3	+36.0	+13.1
Net Current Earnings .....	157.8	+13.3	+ 9.1
Total Recoveries and Transfers from Reserves ..	15.0	+ 5.5	+57.9
Total Losses and Transfers to Reserves ....	40.9	-12.7	-23.7
Profits before Taxes .....	132.0	+31.0	+30.7
Taxes on Income .....	51.9	+15.3	+41.9
Net Profits .....	80.0	+16.1	+25.2
Cash Dividends Declared ..	44.6	+ 2.4	+ 5.6

earnings. Net current earnings (gross earnings minus current expenses) increased by about \$13 million.

The drop in market rates on securities—and the rise in security prices—permitted some banks to augment their profits in still another way. Country banks in particular sold securities and took capital gains.<sup>1</sup> Total recoveries increased, and losses and charge-offs fell. Profits before taxes were about \$31 million higher in 1960 than they had been in 1959.

The tax bite in 1960, however, was about \$15 million higher than it had been the previous year. This cut after-tax profits down to \$80 million or about \$16 million higher than in 1959.

#### A better year for some than others

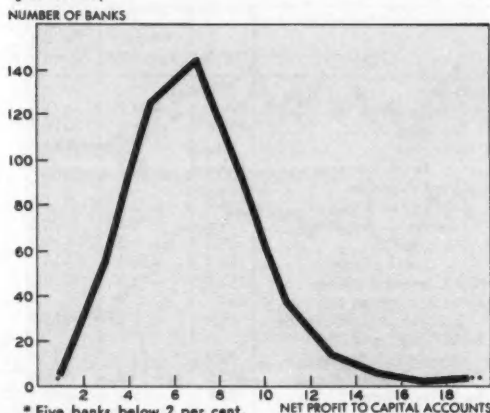
There are almost 500 member banks in the Third

<sup>1</sup> Losses on securities were also reduced from the 1959 level. This reduction added substantially to the increase in before-tax profits.

### CHART 1

#### A VARIETY OF PROFIT RATES

Ratios of net profit to capital accounts of district banks in 1960 ranged from below 2 per cent to over 18 per cent. Several banks showed losses and one bank had a rate slightly over 20 per cent. But more than half of the banks had rates of between 4 and 8 per cent.†



\* Five banks below 2 per cent.

\*\* Three banks over 18 per cent.

† The mean of the ratios was 6.9. The median was 6.6.

TABLE II  
EARNING AND PROFIT RATES

Third Federal Reserve District Member Banks, 1960

BANKS Classified According to Average Deposits	No. of Banks	Net Current Earnings	Ratios to Capital Accounts*	
			Profits	
			Before Income Tax	After Income Tax
\$2,000,000 and less .....	67	9.7	9.1	6.7
\$2,000,001 to \$5,000,000 .....	161	10.1	8.7	6.3
\$5,000,001 to \$10,000,000 .....	129	11.1	9.3	7.0
\$10,000,001 to \$20,000,000 .....	70	12.4	10.3	7.0
\$20,000,001 to \$100,000,000 .....	45	14.7	13.7	8.9
Over \$100,000,000 .....	14	19.1	15.8	8.8

\* Averages of ratios for individual banks.

District. They constitute a varied assortment of sizes and shapes. A few are very large with deposits close to or exceeding \$1 billion. A few are very small with deposits under \$1 million. Most lean to the small side with deposits running under \$6 million.

In 1960, the profit rates of individual banks—the ratio of profits-after-taxes to capital accounts—also showed considerable variety. The rates ranged from a high of slightly over 20 per cent to a low of minus 5.7 per cent (the low reflecting a loss rather than a profit). About one-half of the banks in the district had profit rates above 6.6 per cent with the other half below.

In 1960, the large banks did somewhat better than the small banks, as is shown in Table II. Ratios of earnings and profits to capital accounts generally increased as size increased.

An analysis of bank profit rates from 1945 to 1959 clearly shows that, over the years, the size of banks has made a difference.<sup>2</sup> Over the past three or four years, the data suggest that the larger banks have, for the most part, become the more profitable ones. The larger banks were not so consistently "more profitable" in earlier years.

<sup>2</sup> A median test was run on profit rate data in seven size classifications of banks for the period from 1945 to 1959. The test indicated that there is a significant difference among profit rates in different classifications. The hypothesis that there is no significant difference was rejected with a confidence greater than 99 per cent. The observed Chi-square value, with 6 degrees of freedom, was 34.7.

**From the banker's point of view—  
a good year, but . . .**

Nineteen hundred and sixty was a better year than 1959 for district banks; but from the banker's point of view, there were a few buts.

Gross earnings increased.

But current expenses increased also and by a larger percentage.

Net profits rose by a substantial amount.

But capital gains on securities helped considerably and these gains are of a non-recurring nature.

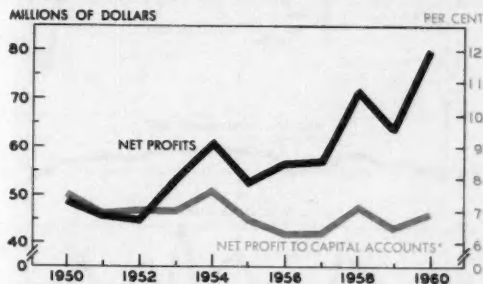
The average ratios of profit to capital accounts increased.

But not by very much. This average, as shown in Chart 2, has demonstrated a suspicious tendency to sag. The sag suggests that, over the past decade, a considerable number of banks have experienced adverse movements in their profit rates.

## CHART 2

### RISING PROFITS BUT SAGGING PROFIT RATES

*Net profits of district banks have increased substantially since 1950. But the average of profit rates has shown a tendency to decline.*

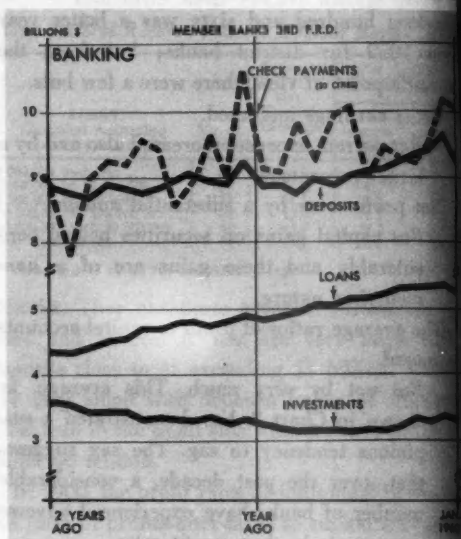
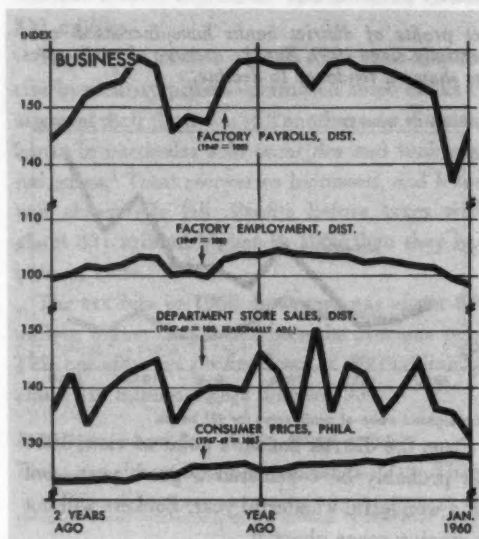


\* Unweighted mean of profit rates for 487 banks.

From the district banker's point of view, 1960 will probably be considered a good year—but not a wonderful-wonderful year. Bankers will not be singing songs about it.



## FOR THE RECORD...



	Third Federal Reserve District		United States	
	Per cent change		Per cent change	
SUMMARY	Jan. 1961 from		Jan. 1961 from	
	mo. ago	year ago	mo. ago	year ago
<b>OUTPUT</b>				
Manufacturing production.	+ 6	-10	0	-10
Construction contracts ...	-10	+20	- 9	+13
Coal mining .....	+ 2	-22	0	-13
<b>EMPLOYMENT AND INCOME</b>				
Factory employment				
(Total) .....	- 1	- 5	- 2	- 5
Factory wage income....	+ 6	- 8	...	...
<b>TRADE*</b>				
Department store sales ...	- 3	-10	- 3	- 3
Department store stocks ..	- 2	- 1	...	...
<b>BANKING</b> (All member banks)				
Deposits .....	- 4	+ 5	- 2	+ 5
Loans .....	- 2	+ 9	- 4	+ 3
Investments .....	- 2	+ 2	+ 1	+ 7
U.S. Govt. securities....	- 2	+ 2	+ 1	+ 9
Other .....	- 1	+ 1	0	+ 4
Check payments .....	0†	+10†	- 4	+ 8
<b>PRICES</b>				
Wholesale .....	...	...	0	0
Consumer .....	0†	+ 2†	0	+ 2

LOCAL CHANGES	Factory*				Department Store†				Check Payments	
	Employ- ment		Payrolls		Sales		Stocks			
	Per cent change Jan. 1961 from		Per cent change Jan. 1961 from		Per cent change Jan. 1961 from		Per cent change Jan. 1961 from		Per cent change Jan. 1961 from	
	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago
Lehigh Valley	-3	-3	-2	-9	....	....	....	....	+2	+4
Harrisburg ...	-4	-13	+1	-20	....	....	....	....	-4	+3
Lancaster ....	0	-5	0	-8	-4	-12	-3	-1	+2	-5
Philadelphia .	0	-3	+8	-3	-2	-9	0	0	-1	+7
Reading .....	-2	-5	-1	-8	-10	-16	+3	-6	+15	+17
Scranton .....	-1	-1	-1	-1	-8	-8	-1	-2	-3	+3
Trenton .....	+4	-11	+13	-16	-7	-13	+6	+5	0	+6
Wilkes-Barre .	-2	-4	0	-3	-2	-14	-3	-13	-4	+13
Wilmington ..	-3	-7	-5	-6	-3	-9	0	-1	+6	+6
York .....	-1	-2	+7	-3	-8	-12	-18	-14	+12	+14

\*Not restricted to corporate limits of cities but covers areas of one or more counties.

†Adjusted for seasonal variation.

\*Adjusted for seasonal variation.

†20 Cities

‡Philadelphia



rect  
ment

cont  
top  
1961  
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year  
age

+ 4  
+ 2  
- 5  
+ 7  
+ 19  
+ 3  
+ 6  
+ 23  
+ 46  
+ 11  
one